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New Locality Records for the Dismal Swamp Green Stink Bug (Heteroptera: Pentatomidae)

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Heretofore known only from the Great Dismal Swamp in extreme southeastern Virginia, the green stink bug *Chlorochroa (Rhytidolomia) dismalia* Thomas 1983, is justly considered one of the rarest pentatomids of North America. It was recommended for "Threatened" status in Virginia by Hoffman (1991), classified as a category 2 candidate species by the U.S. Fish and Wildlife Service from November 1991 until February 1996 (this category was formally abolished on the latter date), and ranked as GH/SH (globally/state historic) by the Virginia Division of Natural Heritage. The species is apparently known

only from the holotype (USNM) and a second specimen (LSU) from the Dismal Swamp (Schweitzer, 1989; Thomas, 1983). The former was collected on 2 August 1938 by L. D. Anderson (Thomas, 1983) and the latter (at Lake Drummond) on 13 June 1938 by A. M. Brues (L. H. Rolston, pers. comm.).

During a recent cursory scan of miscellaneous pentatomid material in the entomological collection of North Carolina State University (NCSU), Hoffman noticed that the tray headed "*Rhytidolomia senilis*" appeared to contain two rather different species.

Re-identification of the specimens using the revision by Thomas (1983) showed that half were correctly identified, but that five others are unquestionably *C. dismalia*. There is precise concurrence with the original description in all details of coloration and body structure, and the three apical lobes of the male parameres agree exactly with Thomas' figure of that structure in the holotype.

On learning of the preceding discovery, Robert L. Blinn (NCSU) examined the material of *Chlorochroa* in the collection of the North Carolina Department of Agriculture (NCDA) and determined that the locality for

Rhytidilomia senilis cited by Brimley (1938: 61) is based upon a specimen of *C. dismalia*. More recently, Hoffman had the opportunity to search the insect collections of the Museum of Natural History, University of Georgia (UGCA) and of the Department of Entomology, Clemson University (CUCC), finding a specimen from South Carolina in the latter. With these additions, collection data for these records are as follows:

North Carolina: Onslow Co.: Jacksonville, 26 June 1959, W. D. Duckworth, 1♂, 1♀ (NCSU); Hyde County without further data, 16 June 1959, David A. Young, 1♂,

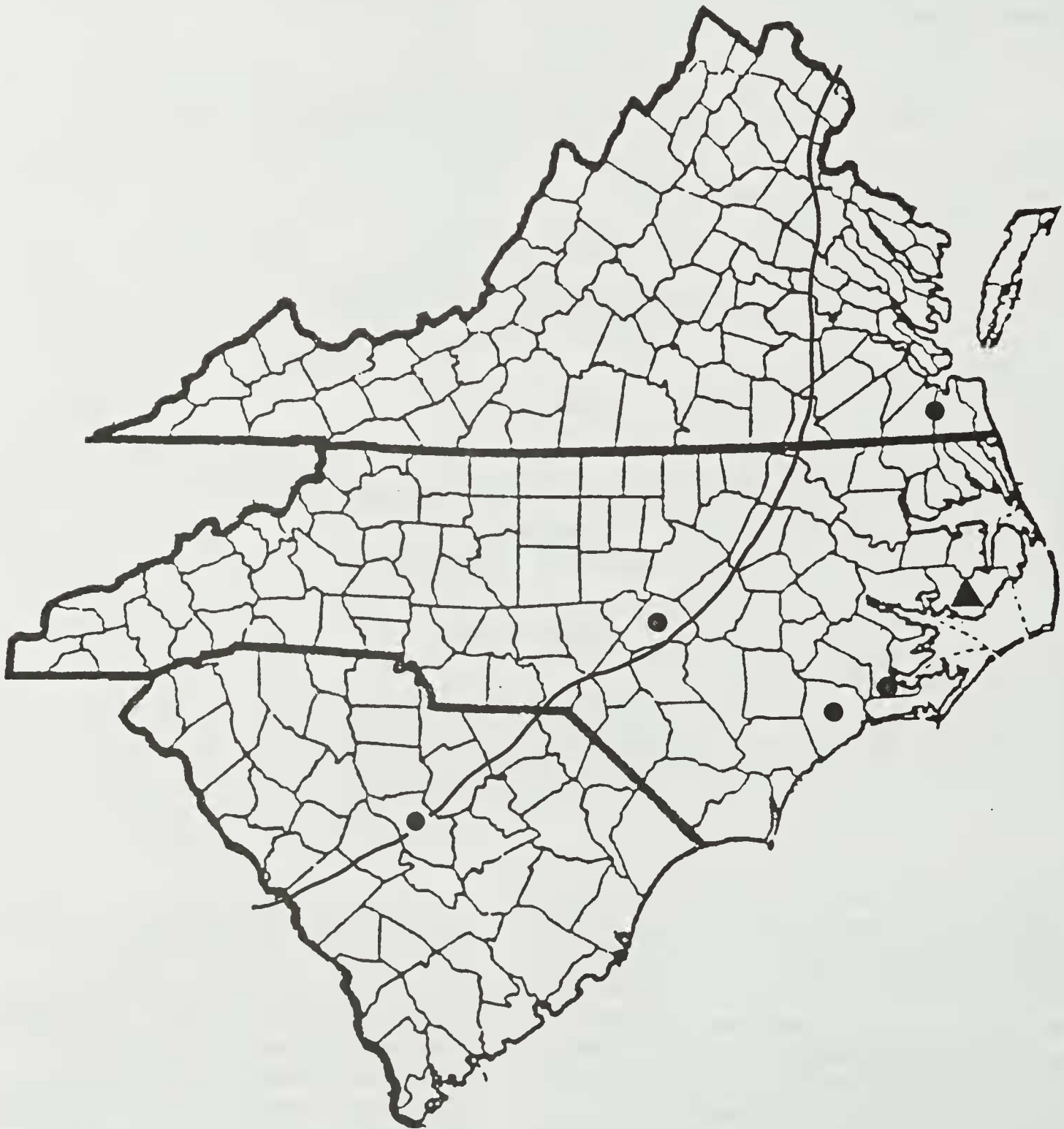


Fig. 1. Known distribution of *Chlorochroa dismalia*. The imprecise location in Hyde County, North Carolina is indicated by a triangle. Approximate location of the Fall Line is shown by the north-south line.

1 ♀ (NCSU); Harnett Co.: Spout Springs, 10 July 1929 (collector not indicated) (NCDA). Without locality label: "Mid. Sept. 09, Z. P. Metcalf", 1 ♀ (NCSU).

South Carolina: Richfield Co., Columbia, 1 May 1926, D.[O.?] Cartwright, 1 ♂ (CUCC).

Beginning in 1992, zoologists (particularly Roble) from the Virginia Department of Conservation and Recreation, Division of Natural Heritage have actively sought *C. dismalia* in southeastern Virginia, focusing most of their surveys in the Great Dismal Swamp National Wildlife Refuge. Survey methods included sweep netting and beating of vegetation, blacklight traps and sheets, and (for a brief period only) Malaise traps. Sweep netting of grass and cane (*Arundinaria tecta*) dominated areas along the refuge ditches was the primary survey method. Cane stands were also visually inspected for the presence of pentatomids on several occasions. Surveys conducted in the refuge on 18 dates from 1992-1997 (18 April-2 October) failed to yield any additional specimens of *C. dismalia* (Roble, 1997). However, on the night of 10 April 1998, Roble and Quinter collected 3 *C. dismalia* adults (2 ♂, 1 ♀ in VMNH) along Williamson Ditch in the northern portion of the refuge while searching cane stems for moth larvae. The air temperature was approximately 5° C and the moon was one night shy of full; all specimens were found between 0010 h and 0210 h. Upon being informed of the significance of this discovery, Quinter reported that he had observed two *C. dismalia* adults just three days earlier while conducting a diurnal survey of cane stands along Forest Service Road 147 in the Croatan National Forest, Craven County, North Carolina. One specimen was retained as a voucher (AMNH). A return trip to the Williamson Ditch site by Roble and Quinter on 16 May 1998 revealed that all cane stems along this road had been cut during routine mowing operations by wildlife refuge personnel, thus rendering it impossible to search for additional specimens of *C. dismalia*.

The known range of this species is herewith extended some 300 miles (480 km) south and southwest through the Coastal Plain, and the possibility of still further extension into southeastern Georgia is evident (see map, Fig. 1). The recent collections indicate a close association of *C. dismalia* with cane. Additional surveys of this plant will likely yield more specimens and help to further delineate the range and status of *C. dismalia*.

ACKNOWLEDGMENTS

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